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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/897,365	07/02/2001	Adrianus Wilhelmus Maria Van Den Enden	NL 000385 8465		
24737 75	90 07/15/2004		EXAMINER		
PHILI <b>PS</b> INTELLECTUAL PROPERTY & STANDARDS			NOLAN, DANIEL A		
P.O. BOX 3001	MANOR, NY 10510		ART UNIT PAPER NUMBER		
BRITINGENT	, , , , , , , , , , , , , , , , , , ,	,	2654	· · · · · · · · · · · · · · · · · · ·	
			DATE MAILED: 07/15/2004	10	

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application N	0.	Applicant(s)			
	09/897,365		VAN DEN ENDEN ET AL.			
Office Action Summary	Examiner		Art Unit			
	Daniel A. Nolai	n	2654			
The MAILING DATE of this communication a Period for Reply	appears on the cov	er sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM						
THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a relif NO period for reply is specified above, the maximum statutory perions are reply within the set or extended period for reply will, by staten any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).  Status	N. 1.136(a). In no event, ho reply within the statutory r iod will apply and will expi tute, cause the application	owever, may a reply be tim minimum of thirty (30) days re SIX (6) MONTHS from n to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
1) Responsive to communication(s) filed on 24	l May 2004.					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ Th	nis action is non-fir	nal.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 7-18 is/are pending in the application	on.					
• • • • • • • • • • • • • • • • • • • •	4a) Of the above claim(s) is/are withdrawn from consideration.					
)⊠ Claim(s) <u>14-18</u> is/are allowed.						
6)⊠ Claim(s) <u>7-13</u> is/are rejected.	☑ Claim(s) <u>7-13</u> is/are rejected.					
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and	d/or election requi	rement.				
Application Papers						
9)⊠ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on 24 May 2004 is/are:	10)⊠ The drawing(s) filed on <u>24 May 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.					
Applicant may not request that any objection to the	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. §§ 119 and 120						
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume 3. Copies of the certified copies of the priority docume * See the attached detailed Office action for a l 13) Acknowledgment is made of a claim for dome since a specific reference was included in the 37 CFR 1.78. a) The translation of the foreign language   14) Acknowledgment is made of a claim for dome reference was included in the first sentence of	ents have been recents have been recents have been recently documents eau (PCT Rule 17 list of the certified estic priority under first sentence of the provisional applications priority under	ceived. ceived in Application have been received2(a)). copies not received .35 U.S.C. § 119(e) he specification or ation has been received.	on No  ed in this National Stage  ed.  e) (to a provisional application)  in an Application Data Sheet.  eived.  and/or 121 since a specific			
1) X Notice of References Cited (PTO-892)			(PTO-413) Paper No(s)			
<ul> <li>2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449) Paper No(s</li> </ul>		Notice of Informal P Other:	atent Application (PTO-152)			

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#### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### Response to Amendment

- 2. The filing of 24 May 2004 was applied to the following effect:
- Claims 1-6 were cancelled.
- Claims 7-18 were added and examined on the merits.
- The specification was changed as indicated and the objections are withdrawn.
- The requested drawings are accepted and the objection is withdrawn as satisfied.

#### Specification

- 3. The disclosure is objected to because of the following informalities:
- Section headings for such as the Brief Summary of the Invention, Explanation of the
   Drawings, etc. cited as follows in the previous Office Action, remain missing:

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. <u>Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading.</u>
If no text follows the section heading, the phrase "Not Applicable" should follow the section heading...

Appropriate correction is required.

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### Claim Rejections - 35 USC § 101

4. Claims 7-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are not in the useful technical arts, consisting of types of mathematical subject matter not entitled to patent protection standing alone.

## Allowable Subject Matter

- 5. Claims 14-18 are allowed.
- 6. The following is a statement of reasons for the indication of allowable subject matter:
- The present invention is directed to obtaining filter parameters from LSF.
- Regarding claim 14, Fette et al teach receiving a filter description (column 7 lines 10-12) comprising line spectral frequency coefficients (column 7 lines 12-15), Ramo teaches the step of computing a linear predictive coding filter from the line spectral frequency coefficients by computing an inverse polynomial (column 1 lines 1-2) by creating an ordered original series of polynomial factors comprising polynomial factors calculated from the line spectral frequency coefficients ([¶0010] line 1) and Rotola-Pukkila et al read on the step of reducing the number of polynomial factors in the original series, combining the polynomial factors in pairs until only two final

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polynomial factors remain (by applying the liberal interpretation of decomposing, column 2 lines 5-13). The step of <u>forming the inverse polynomial by multiplying the two final polynomial factors</u> for calculating the filter coefficients from the inverse polynomial were neither anticipated nor was it found in obvious combination in the prior art of record.

- Claims 15-18 depend on a claim that was allowed and are accolwed for that reason.

#### Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Rotola-Pukkila et al (U.S. Patent 6,732,070 B1) wideband speech codec using a higher sampling rate in analysis and synthesis filtering than in excitation searching.
- Asghar et al (U.S. Patent 6,003,003 A) speech recognition system having a
  quantizer using a single robust codebook designed at multiple signal to noise ratios.
- Fette et al (U.S. Patent 5,255,339 A) low bit rate vocoder means and method.
- Van Den Enden et al (U.S. Patent Publication 2002/0032562 A1) calculating line spectral frequencies.
- Ramo (U.S. Patent Publication 2003/0014249 A1) line spectral frequency vector quantization in speech codec.
- 9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Daniel A. Nolan at telephone (703) 305-1368 whose normal business hours are Mon, Tue, Thu & Fri, from 7 AM to 5 PM.

If attempts to contact the examiner by telephone are unsuccessful, supervisor Richemond Dorvil can be reached at (703)305-9645.

The fax phone number for Technology Center 2600 is (703)872-9314. Label informal and draft communications as "DRAFT" or "PROPOSED", & designate formal communications as "EXPEDITED PROCEDURE". Formal response to this action may be faxed according to the above instructions,

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or mailed to:

Mail Stop AF (or CPA, etc. – see Official Gazette, 04 November 2003)

P.O. Box 1450

Alexandria, VA 22313-1450

or hand-deliver to: Crystal Park 2,

2121 Crystal Drive, Arlington, VA,

Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office at telephone number (703) 306-0377.

> Daniel A. Nolan Examiner Art Unit 2654

DAN/d July 2, 2004

SUPERVISORY PATENT EXAMINER

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